CLAIMS

What is claimed is:

1. A controller for controlling the illumination of a plurality of decorative light strings in a lighting display, said controller comprising:

a plurality of output ports, each being connectable to a power plug of one of the decorative light strings of the lighting display; and

a controller circuit operatively connected to said plural output ports for selectively providing operating power to the plural output ports for illuminating the light strings connectable to said plural output ports according to programmed patterns executed by said controller circuit wherein at least two of the power output ports are respectively provided with operating power according to different programmed patterns.

2. The controller of claim 1, wherein said two different patterns start and end synchronously.

3. The controller of claim 1, wherein each of the output ports receives a different programmed pattern of operative power.

4. The controller of claim 1, further comprising a memory device containing a plurality of patterns.

5. The controller of claim 4, wherein said different programmed patterns are user selectable from said memory device.

6. The controller of claim 5, further comprising a user input device for selecting said different programmed patterns.

7. The controller of claim 6, wherein said user input device comprises buttons on said controller.

8. The controller of claim 6, wherein said user input device comprises a remote control device.

9. The controller of claim 4, wherein said different programmed patterns are randomly assigned from said memory device.

10. The controller of claim 1, further comprising a dusk detecting device having an output that changes in response to an amount of incident light and, means for turning on said controller circuit in response to said dusk detecting device.

11. The controller of claim 10, wherein said means for turning on said control circuit comprises a timing device for keeping the controller circuit on for a desired time period.

12. The controller of claim 11, further comprising a user input device for selecting said desired time period.

13. The controller of claim 1, wherein said controller circuit comprises a plurality of power controllers selectively providing operating power to respective ones of

said plural output ports according to a show which defines a pattern for each of said plural output ports and comprises said different programmed patterns.

14. The controller of claim 13, further comprising a memory device containing a plurality of shows, each show containing different programmed patterns for each of said plural output ports.

15. The controller of claim 13, wherein said shows are user selectable from said memory device.

16. The controller of claim 15, further comprising a user input device for selecting said shows.

17. The controller of claim 2, wherein said controller device is connectable to an input AC voltage supply and each of said programmed patterns is timed relative to the frequency of the input AC voltage supply.

18. The controller of claim 17, further comprising a manually operable reset device for restarting a time period of each of said programmed patterns for synchronizing said controller with other controllers.

19. The controller of claim 21, wherein said controller comprises means for automatic synchronization with other controllers.

20. A controller for controlling the illumination of a plurality of decorative light strings in a lighting display, said controller comprising:

a plurality of output ports, each being connectable to a power plug of one of the decorative light strings of the lighting display; and

means, operatively connected to said plural output ports, for selectively providing operating power to the plural output ports for illuminating the light strings connectable to said plural output ports according to programmed patterns, wherein at least two of the power output ports are respectively provided with operating power according to different programmed patterns.

21. The controller of claim 20, wherein said two different patterns start and end synchronously.

22. The controller of claim 20, wherein each of the output ports receives a different programmed pattern of operative power.

23. The controller of claim 20, further comprising a memory device containing a plurality of patterns.

24. The controller of claim 23, wherein said different programmed patterns are user selectable from said memory device.

25. The controller of claim 24, further comprising a user input device for selecting said different programmed patterns.

26. The controller of claim 25, wherein said user input device comprises buttons on said controller.

27. The controller of claim 25, wherein said user input device comprises a remote control device.

28. A controller system for controlling the illumination of a plurality of decorative light strings in a lighting display, said controller comprising:

a plurality of controller devices,

wherein each of said controller devices includes a plurality of output ports, each of said output ports being connectable to a power plug of one of the decorative light strings of the lighting display, and a controller circuit operatively connected to said plural output ports for selectively providing operating power to the plural output ports for illuminating the light strings connectable to said plural output ports according to programmed patterns, and

wherein said controller devices are connectable to an input AC voltage supply and each of said programmed patterns is timed relative to the frequency of the input AC voltage supply such that said plural controller devices are synchronized by the frequency of said input AC voltage supply.

29. The controller system of claim 28, wherein each of said control devices comprises a reset button actuatable for starting the running of the programmed patterns, thereby allowing synchronization of programmed patterns in different ones of said plural controller devices by simultaneous actuation of said reset buttons of said different ones of said plural controller devices.

30. The controller system of claim 28, wherein each of said controllers comprises means for automatically synchronizing with the others of said controllers.

31. The controller system of claim 30, wherein each of said controllers comprises means for communicating timing information between the others of said controller.

32. The controller system of claim 28, wherein said controller circuit of each of said controller devices comprises a plurality of power controllers selectively providing operating power to respective ones of said plural output ports according to a show which defines a pattern for each of said plural output ports.

33. The controller system of claim 32, wherein each of said controller devices further comprises a memory device containing a plurality of shows, each show containing different programmed patterns for each of said plural output ports.

34. The controller system of claim 33, wherein said shows are user selectable from said memory device.

35. The controller system of claim 34, further comprising a user input device for selecting said shows.

36. The controller system of claim 35, wherein said user input comprises buttons on said controller devices.